What Is Claimed Is:

1. A sputtering system for depositing a thin film on a substrate, comprising:

a vacuum chamber;

a support for supporting the substrate in the vacuum chamber;

a target arranged to oppose the support;

a fixed plate formed on a first side of the target; and

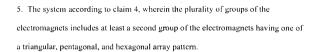
a plurality of electromagnets formed on the fixed plate in a cell pattern.

2. The system according to claim 1, wherein the plurality of electromagnets are individually controlled.

3. The system according to claim 1, wherein the cell pattern includes a plurality of groups of the electromagnets, each group being separately controlled.

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4. The system according to claim 3, wherein the plurality of groups of the electromagnets includes at least a first group of the electromagnets having one of a triangular, penragonal, and hexagonal array pattern.



 The system according to claim 5, wherein the first group of the electromagnets is independently controlled from the second group of the electromagnets.

- 7. The system according to claim 1, wherein the cell pattern includes a matrix array pattern of the plurality of electromagnets.
- The system according to claim 1, wherein the cell pattern includes a hexagonal array pattern of the plurality of electromagnets.

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